



National Transportation Safety Board Aviation Accident Final Report

Location:	GRAND JUNCTION, CO	Accident Number:	DEN93LA006
Date & Time:	10/17/1992, 1911 MDT	Registration:	N14695
Aircraft:	BELLANCA 17-30A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

WHEN THE PILOT LOWERED THE LANDING GEAR, THE GEAR UNSAFE LIGHT ILLUMINATED. THE PILOT MADE A LOW PASS AND CONTROL TOWER PERSONNEL ADVISED HIM THE GEAR APPEARED TO BE DOWN. WHEN THE AIRPLANE LANDED, IT SWERVED OFF THE RUNWAY AND THE NOSE GEAR COLLAPSED. POST INCIDENT EXAMINATION DISCLOSED THAT THE UPPER DRAG STRUT BRACKET WAS BROKEN. METALLURGICAL EXAMINATION REVEALED THE FRACTURED PIECES 'EXHIBITED FEATURES TYPICAL OF FATIGUE CRACKING' AT MULTIPLE POINTS OF ORIGIN AND 'OVERSTRESS SEPARATIONS.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FATIGUE FAILURE OF THE NOSE LANDING GEAR UPPER DRAG STRUT BRACKET DUE TO FATIGUE CRACKING.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR, NOSE GEAR ATTACH POINT - FAILURE, TOTAL
2. (C) LANDING GEAR, NOSE GEAR ATTACH POINT - FATIGUE

Occurrence #2: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	45, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	09/16/1991
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	772 hours (Total, all aircraft), 267 hours (Total, this make and model), 632 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELLANCA	Registration:	N14695
Model/Series:	17-30A 17-30A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	74-30688
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	07/30/1992, Annual	Certified Max Gross Wt.:	3325 lbs
Time Since Last Inspection:	113 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2540 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	IO-520-K
Registered Owner:	CLASSIC WINGS, INC.	Rated Power:	300 hp
Operator:	CLASSIC WINGS, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Thin Broken / 12000 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16° C / -4° C
Precipitation and Obscuration:			
Departure Point:	TOOELE, UT (TVY)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	1740 MDT	Type of Airspace:	Class D

Airport Information

Airport:	WALKER FIELD (GJT)	Runway Surface Type:	Asphalt
Airport Elevation:	4858 ft	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	
Runway Length/Width:	10501 ft / 150 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	08/26/1993
Additional Participating Persons:	CHARLES KNIPPLE; SALT LAKE CITY, UT		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).